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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,383	05/25/2001	Faramarz Rabii	2357.2004-001	4431

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EXAMINER

INOA, MIDYS

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/866,383	Applicant(s) RABII ET AL.	
	Examiner Midys Inoa	Art Unit 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-72 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-29 are drawn to a non-hierarchical file subsystem comprising multiple data partitions with fixed length segments for storing data within variable length object spaces (711/170,173) further comprising a metadata disk partition for storing metadata information and an object directory (711/205, 207, 208, 209) for retrieving data using a hash value (711/216) wherein a data object is written to overwrite a previously stored data object in a segment based on a time stamp indicating when the previous data object was stored (711/159, 160), classified in class 711, subclasses 159, 160, 170, 173, 205, 207, 208, 209, and 216.
 - II. Claims 30-38 are drawn to partitioning a memory device into multiple segments (711/170, 173) and storing a new data object in a particular segment of the memory device overwriting previously stored data objects depending on a time when data objects filling the memory device were previously stored (711/159, 160), classified in class 711, subclasses 159, 160, 170, 173.
 - III. Claims 39-44 are drawn to partitioning a memory device into segments to store data objects of varying size, determining that a new data object is to be stored, and writing the new data object in the free memory space, classified in class 711, subclasses 170, 173.
 - IV. Claims 45-72 are drawn to partitioning a memory device into segments to store data objects of varying size (711/170, 173) and maintaining a directory table

including a plurality of blocks (711/ 205, 207, 208, 209) and storing a hash value (711/216), classified in class 711, subclass 170, 173, 205, 207, 208, 209, and 216.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group III does not require overwriting previously stored data or using a directory table for retrieving data using a hash value. The subcombination in group I has separate utility such as use in a storage system where having the most up to date data is imperative (thus overwriting old data) and where fast and efficient data retrieval is crucial (thus the use of hashing for data retrieval).

3. Inventions III and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group III does not require overwriting previously stored data. The subcombination in group II has separate utility such as use in a storage system where having the most up to date data is imperative (thus overwriting old data).

4. Inventions III and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group III does not require using a directory table for retrieving data using a hash value. The subcombination in group IV has separate utility such as use in a storage system where fast and efficient data retrieval is crucial (thus the use of hashing for data retrieval).

5. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group II does not require using a directory table for retrieving data using a hash value. The subcombination in group I has separate utility such as use in a storage system where fast and efficient data retrieval is crucial (thus the use of hashing for data retrieval).

6. Inventions IV and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

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case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group IV does not require overwriting previously stored data. The subcombination in group I has separate utility such as use in a storage system where having the most up to date data is imperative (thus overwriting old data).

7. Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention II has separate utility such as use in a storage system where having the most up to date data is imperative (thus overwriting old data).

In the instant case, invention IV has separate utility such as use in a storage system where fast and efficient data retrieval is crucial (thus the use of hashing for data retrieval).

See MPEP § 806.05(d).

8. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, the search required for group II is not required for groups III or IV, and the search required for group IV is not required for groups III or II, restriction for examination purposes as indicated is proper.

9. A telephone call was made to Attorney Steven J. Frank (33497) on March 8th, 2005 to request an oral election to the above restriction requirement, but did not result in an election being made. Examiner was not able to reach the attorney.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Midys Inoa whose telephone number is (571) 272-4207. The examiner can normally be reached on M-F 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Midys Inoa

Midys Inoa
Examiner
Art Unit 2188

Mano Padmanabhan
3/19/05

MI

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER